

BELMA ALPER UÇAR

**THE EFFECTS OF THE LEARNING TOGETHER THROUGH EXPERIMENT
TECHNIQUE ON ACADEMIC ACHIEVEMENT OF 9TH GRADE STUDENTS
TOWARDS PHYSICS COURSE**

ABSTRACT

The main purpose of this research is to determine the effects of the Learning Together through Experiment Technique on academic achievement of the students towards 9 th grade Physics course on “Matter and Properties” unit and the problems that occur during the application.

The sample of the study consist of 119 ninth grade Anatolian high school students (61 girls, 58 boys) who are attending a state school in 2007-2008 academic term at the centre district of Aydın. Two experimental groups and two control groups were assigned in the study. The experimental groups learned Physics by using the Learning Together through Experiment Technique and the control groups learned Physics by using the whole class instruction.

Data has been collected by achievement test, semi-structured interview forms and structured observation forms designed by the researcher. Achievement test which was used for data gathering materials were practiced as a pretest before the experimental activities, as a posttest after the experimental treatment and it was performed as a retention test.

SPSS (11.5) was used for quantitative data analysis materials. The results showed that; Learning Together through Experiment Technique had positive effects on achievement towards Physics lesson and retention of the learning. The results were getting from the observation and interview forms showed that; Learning Together through Experiment Technique had positive effects on the socialization, communication skills and friendship relevance of the students. It was said that; Learning Together through Experiment Technique can use in the school without laboratory and science lessons teaching with the experiments.

KEY WORDS: Learning Together through Experiment Technique, Cooperative Learning, Physics Course, 9th Grade, Qualitative Research.